


Engineer: Jack Curtis	Date: 4/22/04	 <b>JPS Communications</b> 5800 Departure Drive, Raleigh, NC 27616			
Drawn: Jack Curtis	Date: 4/22/04				
Approved: CTS	Date: 4/22/04	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 2/10/05	Size: A	Dwg. #: <b>5961-271223-APP</b>	Rev: <b>B</b>	Sheet: 1            Of    1

**APPLIES TO:**                      Racal Guardian G25RPV100 Portable Radio

**RADIO MODIFICATIONS:**    None required.

**RADIO PROGRAMMING:**    None required.

**RADIO CONTROLS:**

1.        Adjust the Volume Control until the yellow "SIGNAL" indicator on the associated DSP Module flashes with receive audio.

**CABLING:**

Standard ACU-1000 and ACU-T Interface cables are made up of a 2 foot TRP Radio Tray Interface cable and the appropriate 13-foot Extension cable.

ACU-1000 Interface Cable	JPS P/N 5961-291223	(5961-271223 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281223	(5961-271223 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271223	
Radio RF Connector Type		

**DSP-1 JUMPERS:**

JP1	Low Impedance *
JP2	Balanced *

**DSP PROGRAMMING:**            (See Notes)

RX Level	3*	0dBm*
TX Level	6*	0dBm*
Squelch Type	VOX*	
COR Polarity	Active Low*	
High Frequency Equalizer	4*	Flat*
RX Audio Delay	2*	100 ms*
TX Audio Delay (Radio Type)	0*	No Delay*
Noise Reduction Value	0*	Off*
VOX/VMR Threshold	1*	Med1*
VOX/VMR Hang Time	3*	775 ms*
COR Inhibit After PTT	1*	100 ms*
All Others	As needed	

(\* Indicates Default Value)

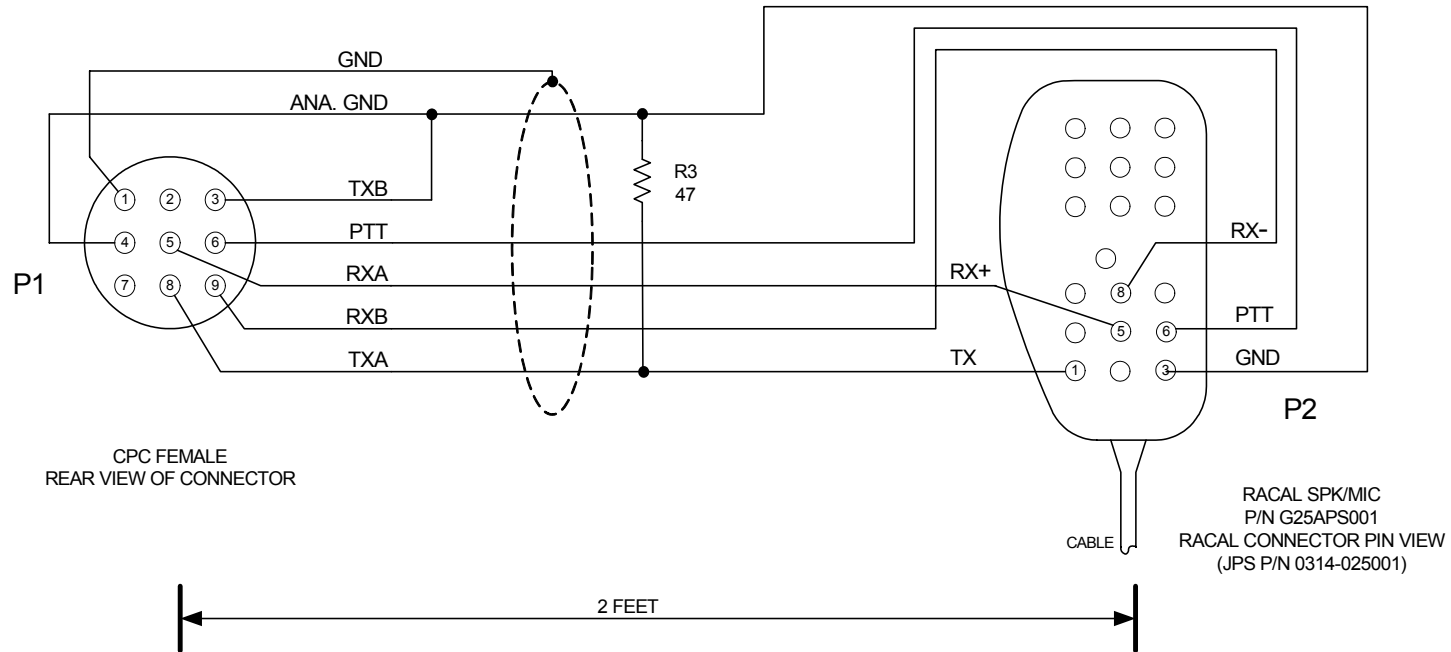
**NOTES:**

Raytheon JPS Communications has not developed specific settings for this model of radio. Use the generic DSP Setup Procedure to optimize the default values.

# PURCHASED PART

Rev	ECO	Date
B		2-3-05

USE MOLDED CABLE  
(JPS P/N 5961-261003-00)



CPC FEMALE  
REAR VIEW OF CONNECTOR

RACAL SPK/MIC  
P/N G25APS001  
RACAL CONNECTOR PIN VIEW  
(JPS P/N 0314-025001)

COMPONENT PCB  
(JPS P/N 5961-271000)

R3 JPS P/N 1820-470000  
JU1  
JU2  
JU4  
JU5

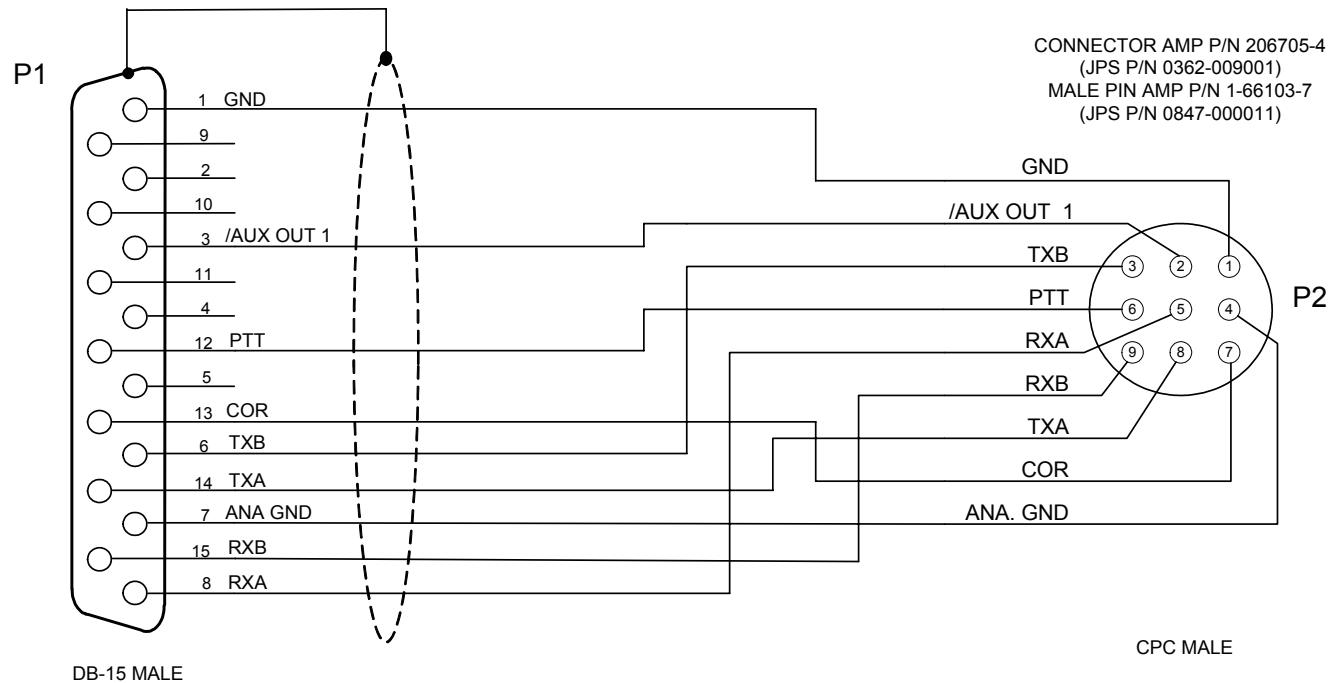
NOTES SHIELD DRAIN CONNECTED TO PIN 1 OF P1 ONLY.

USED WITH:  
RACAL GUARDIAN G25RPV100 PORTABLE

Designed By: CTS	<b>Raytheon JPS Communications</b> Raleigh, NC USA		
Drawn By: EDV	Title CABLE, CPC TO RACAL G25RPV100		
Checked By: JAC	Size A	Document Number <b>5961-271223</b>	Rev B
Issued Date		NOVEMBER 9, 2003	Sheet <u>1</u> of <u>1</u>

# PURCHASED PART

Rev	ECO	Date
A		



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.  
2) CONNECT SHIELD DRAIN TO SHELL OF P1 ONLY.  
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.  
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

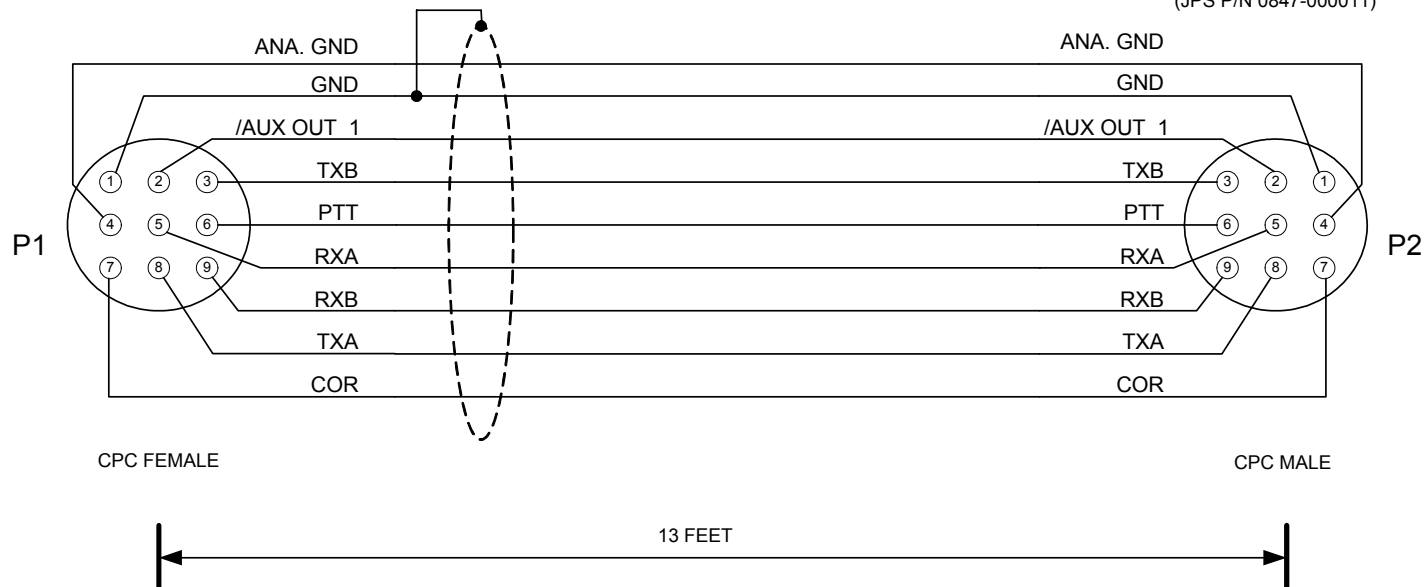
Designed By: JAC	<b>Raytheon JPS Communications</b>		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number <b>5961-261002-00</b>	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	

Rev	ECO	Date
A		

## PURCHASED PART

CONNECTOR AMP P/N 206708-1  
(JPS P/N 0362-005003)  
FEMALE PIN AMP P/N 1-66105-8  
(JPS P/N 0362-005002)

CONNECTOR AMP P/N 206705-4  
(JPS P/N 0362-009001)  
MALE PIN AMP P/N 1-66103-7  
(JPS P/N 0847-000011)



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.  
2) CONNECT SHIELD DRAIN TO PIN 1 OF P1 ONLY.  
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.  
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

Designed By: JAC	<b>Raytheon JPS Communications</b> Raleigh, NC USA		
Drawn By: JAC	Title CABLE, ACU-T RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number <b>5961-281013-00</b>	Rev A
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